

Shri P K Mishra,

Principal Secretary to the Prime Minister of India,

PMO New Delhi India

Dear Sir,

Greetings from the ITU-APT Foundation of India (IAFI) a non-profit, non-political registered society in India. IAFI has been advocating the economic benefits of the Lower 6 GHz band for Wi-Fi, to support innovation, manufacturing and exports.

**A new study presented by the Prof Raul Katz, President, Telecom Advisory Services, LLP, USA and Visiting Prof University of San Andres, Argentina at the recent IAFI Flagship annual event, the 4th Indian Spectrum Management Conference 2024 calculated the economic value for the lower 6GHz band 5925-6425 MHz to the Indian economy at US\$2.9 Billion (Rs. 24467 Crores).**

**Almost the entire world has already delicensed the lower 6GHz band and this provides a huge manufacturing and export opportunity for India. With Asian electronics manufacturing economies such as Vietnam deciding to open the band, this opportunity will be lost soon.**

License exempt use of the lower 6GHz band 5925-6425 MHz will open new opportunities for innovators and manufacturers to develop products and technologies and also increase opportunities for smart home and industrial products being manufactured in India for export markets. Lower 6 GHz band is currently used by satellites and therefore it will not be possible to use this band for licensed mobile operators. However, as various studies have shown, this band could be shared by indoor-only low-power and very low power Wi-fi routers. Since the band cannot be auctioned, delicensing it for Low Power indoor use will not cause any revenue loss to the Government. On the other hand, this move will add huge economic benefit to the

economy and help increase the GDP. In addition, this move will also support, Atamirbhar India as most of the Wi-Fi routers are fully made in the country.

The delicensing of lower 6 GHz band in India will further boost the India's local manufacturing, innovation and exports, not just for telecom but in many other Industrial sector as a whole as most products in future will have inbuilt Wi-Fi modules and India's export of industrial products may be compromised without access to the necessary Wi-Fi modules. As Wi-Fi-6e is still a niche technology, it is easier for the Indian telecom hardware and software companies to corner a large part of this futuristic global market, which we could not do in case of 5 GHz Wi-Fi, as it was delicensed in India after more than 20 years from rest of the world.

It is pertinent to mention here that the Government of India's initiatives to expand broadband access are further enhanced by the PM Public Wi-Fi Program (PM-WANI), which aims to proliferate public Wi-Fi for the masses. Complementing these efforts, the BharatNet Project has significantly advanced rural connectivity, establishing over 104,675 Wi-Fi hotspots to bridge the last mile of internet access. Therefore, delicensing of the lower 6GHz band will support domestic innovation and align with global trends, aligning with similar actions taken by numerous developed and developing countries and is crucial for empowering our engineers and promoting the "Atmanirbhar Bharat" initiative.

With access to wider channels in the 6GHz band, Wi-Fi 6E can deliver blazing-fast speeds of up to 9.6 Gbps, enabling seamless streaming, gaming, and large file transfers. The additional spectrum offered by the 6GHz band alleviates network congestion, especially in densely populated areas, ensuring consistent performance even in high-traffic environments. Wi-Fi 6E's improved latency enables real-time responsiveness, critical for applications such as online gaming, video conferencing, and IoT devices, enhancing user experiences and productivity. By leveraging higher frequencies with less interference, Wi-Fi 6E extends the reach of wireless networks, providing better coverage and connectivity across homes, offices, and public spaces. The proliferation of Internet of Things (IoT) devices and emerging technologies like augmented reality (AR) and virtual reality (VR) necessitates a robust wireless infrastructure, which Wi-Fi 6E can deliver efficiently.

In summary, the deployment of Wi-Fi 6E holds immense promise for India's economy and society by facilitating faster internet speeds and reliable connectivity, empowering businesses to innovate, enhance productivity, and compete on a global scale. Industries such as e-commerce, telemedicine, education, and manufacturing stand to benefit significantly from the adoption of this technology, driving economic growth and job creation. Access to affordable, high-speed internet is a prerequisite for digital inclusion. Delicensing the 6GHz band for Wi-Fi 6E enables more Indians, especially those in underserved rural and remote areas, to bridge the digital divide, access online education, healthcare services, government initiatives, and participate in the digital economy. Wi-Fi 6E provides a fertile ground for innovation and entrepreneurship, enabling start-ups and tech enthusiasts to develop groundbreaking applications and services that leverage its high-speed, low-latency capabilities. This fosters a thriving ecosystem of technology-driven innovation, attracting investment and fostering a culture of entrepreneurship in India.

Wi-Fi 6E holds the promise of transforming India's digital landscape, driving economic prosperity, fostering innovation, and promoting digital inclusion. To unlock its full potential, policymakers must prioritize the delicensing of the 6GHz band, ensuring that this valuable spectrum resource is accessible to all stakeholders. By embracing Wi-Fi 6E, India can build a resilient and inclusive digital infrastructure that empowers individuals, businesses, and communities to thrive in the digital age. Despite the numerous benefits of Wi-Fi 6E, its widespread adoption in India faces regulatory hurdles from the existing mobile operators. With the increasing demand for wireless connectivity, spectrum scarcity poses a significant challenge. Delicensing the 6GHz band unlocks a valuable spectrum resource, providing much-needed capacity to meet the growing demands of consumers and businesses. Many countries worldwide have already recognized the importance of the 6GHz band for Wi-Fi 6E and have moved to delicense it. India must align its spectrum policy with international standards to ensure interoperability, foster innovation, and enable seamless connectivity for global travelers and businesses. The urgency of delicensing the 6GHz band cannot be overstated. Delaying action risks impeding India's technological advancement, hindering economic

growth, and widening the digital divide. By acting swiftly to delicense the 6GHz band, India can position itself as a leader in wireless innovation and secure its digital future.

We therefore humbly request you to kindly announce the lower 6 GHz band for license exempt use of WiFi urgently so that software and hardware exporters in India could access this huge global market.

**Bharat B Bhatia,**

**President, ITU-APT Foundation of India (IAFI)**

**Vice Chairman, Asia Pacific, World Wireless Research Forum(WWRF)**

Country	Status	Spectrum
Andorra	<a href="#">Adopted</a>	5945-6425 MHz
	<a href="#">Considering</a>	6425-7125 MHz
Argentina	<a href="#">Adopted</a>	5925-7125 MHz
Australia	<a href="#">Adopted</a>	5925-6425 MHz
	<a href="#">Considering</a>	6425-7125 MHz

Country	Status	Spectrum
Austria	<a href="#"><u>Adopted</u></a>	5945-6425 MHz
	<a href="#"><u>Considering</u></a>	6425-7125 MHz
Azerbaijan	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Bahrain	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Bangladesh	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Belgium	<a href="#"><u>Adopted</u></a>	5945-6425 MHz
	<a href="#"><u>Considering</u></a>	6425-7125 MHz
Brazil	<a href="#"><u>Adopted</u></a>	5925-7125 MHz
CEPT	<a href="#"><u>Adopted</u></a>	5945-6425 MHz
	<a href="#"><u>Considering</u></a>	6425-7125 MHz
Canada	<a href="#"><u>Adopted</u></a>	5925-7125 MHz

Country	Status	Spectrum
Chile	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Colombia	<a href="#"><u>Adopted</u></a>	5925-7125 MHz
Costa Rica	<a href="#"><u>Adopted</u></a>	5925-7125 MHz
Dominican Republic	<a href="#"><u>Adopted</u></a>	5925-7125 MHz
El Salvador	<a href="#"><u>Adopted</u></a>	5925-7125 MHz
European Union	<a href="#"><u>Adopted</u></a>	5925-6425 MHz (*only adopting 5945-6425)
Faroe Islands	<a href="#"><u>Adopted</u></a>	5945-6425 MHz
	<a href="#"><u>Considering</u></a>	6425-7125 MHz
France	<a href="#"><u>Adopted</u></a>	5945-6425 MHz
	<a href="#"><u>Considering</u></a>	6425-7125 MHz

Country	Status	Spectrum
Germany	<a href="#">Adopted</a>	5945-6425 MHz
	<a href="#">Considering</a>	6425-7125 MHz
Gibraltar	<a href="#">Adopted</a>	5945-6425 MHz
	<a href="#">Considering</a>	6425-7125 MHz
Guatemala	<a href="#">Adopted</a>	5925-7125 MHz
Hong Kong	<a href="#">Adopted</a>	5925-6425 MHz
	<a href="#">Considering</a>	6425-7125 MHz
Iceland	<a href="#">Adopted</a>	5945-6425 MHz
	<a href="#">Considering</a>	6425-7125 MHz
Ireland	<a href="#">Adopted</a>	5945-6425 MHz
	<a href="#">Considering</a>	6425-7125 MHz
Isle of Man	<a href="#">Adopted</a>	5945-6425 MHz
	<a href="#">Considering</a>	6425-7125 MHz

Country	Status	Spectrum
Japan	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
	<a href="#"><u>Considering</u></a>	6425-7125 MHz
Jordan	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Kazakhstan	<a href="#"><u>Adopted</u></a>	5925-7125 MHz
Kenya	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Liechtenstein	<a href="#"><u>Adopted</u></a>	5945-6425 MHz
	<a href="#"><u>Considering</u></a>	6425-7125 MHz
Luxembourg	<a href="#"><u>Adopted</u></a>	5945-6425 MHz
	<a href="#"><u>Considering</u></a>	6425-7125 MHz
Macau S.A.R.	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Malaysia	<a href="#"><u>Adopted</u></a>	5925-6425 MHz



Country	Status	Spectrum
Mauritius	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Mexico	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Monaco	<a href="#"><u>Adopted</u></a> <a href="#"><u>Considering</u></a>	5945-6425 MHz 6425-7125 MHz
Morocco	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Namibia	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Netherlands	<a href="#"><u>Adopted</u></a> <a href="#"><u>Considering</u></a>	5945-6425 MHz 6425-7125 MHz
New Zealand	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Norway	<a href="#"><u>Adopted</u></a> <a href="#"><u>Considering</u></a>	5945-6425 MHz 6425-7125 MHz

Country	Status	Spectrum
Pakistan	<a href="#"><u>Adopted</u></a>	5945-6425 MHz
Peru	<a href="#"><u>Adopted</u></a>	5925-7125 MHz
Philippines	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Portugal	<a href="#"><u>Adopted</u></a> <a href="#"><u>Considering</u></a>	5945-6425 MHz 6425-7125 MHz
Qatar	<a href="#"><u>Adopted</u></a> <a href="#"><u>Considering</u></a>	5925-6425 MHz 6425-7125 MHz
Russian Federation	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Saudi Arabia	<a href="#"><u>Adopted</u></a>	5925-7125 MHz
Singapore	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
South Africa	<a href="#"><u>Adopted</u></a>	5925-6425 MHz

Country	Status	Spectrum
South Korea	<a href="#"><u>Adopted</u></a>	5925-7125 MHz
Spain	<a href="#"><u>Adopted</u></a> <a href="#"><u>Considering</u></a>	5945-6425 MHz 6425-7125 MHz
Switzerland	<a href="#"><u>Adopted</u></a> <a href="#"><u>Considering</u></a>	5945-6425 MHz 6425-7125 MHz
Syria	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Taiwan	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Thailand	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Togo	<a href="#"><u>Adopted</u></a>	5925-6425 MHz
Tunisia	<a href="#"><u>Considering</u></a>	5925-6425 MHz
Turkey	<a href="#"><u>Adopted</u></a>	5925-6425 MHz

---

Country	Status	Spectrum
United Arab Emirates	<u><a href="#">Adopted</a></u>	5925-6425 MHz
United Kingdom	<u><a href="#">Adopted</a></u>	5945-6425 MHz
	<u><a href="#">Considering</a></u>	6425-7125 MHz
United States	<u><a href="#">Adopted</a></u>	5925-7125 MHz

---